

1 LISTING OF CLAIMS

2  
3 1. (Currently amended) An apparatus for controlling the system supply voltage in a system  
4 utilizing a spread spectrum clock signal, the apparatus including:

5 (a) a spread spectrum clock source having a modulation input;

6 (ab) a modulating arrangement including a modulation signal source having an output

7 connected to the modulation input of the spread spectrum clock source, the

8 modulating arrangement applying a first modulation to operatively connected to

9 apply a first modulation to one of the system supply voltage or a clock signal

10 frequency for the system, the first modulation varying the one of the system

11 supply voltage or clock signal frequency about a nominal value for the one of the

12 system supply voltage or clock signal frequency; and

13 (bc) a corresponding modulating arrangement operatively connected to apply a

14 corresponding modulation to the other one of the a system supply voltage or the

15 clock signal frequency, the corresponding modulation varying the other one of the

16 system supply voltage or the clock signal frequency about a nominal value for the

17 other one of the system supply voltage or the clock signal frequency.

18  
19 2-6 Canceled

1 7. (Currently Amended) The apparatus of Claim [[6]] 1 further including a power supply  
2 circuit having a reference input, and wherein the modulation signal source output is  
3 applied to modulate the a signal at the reference input.  
4

5 8. (Previously presented) The apparatus of Claim 7 further including a summing junction  
6 connected to sum a DC reference voltage and the modulation signal source output to  
7 produce a summed output and apply the summed output to the reference input of the  
8 power supply circuit.  
9

10 9. (Original) The apparatus of Claim 1 wherein the first modulation and the corresponding  
11 modulation comprise unequal waveforms.  
12

13 10. (Currently amended) A spread spectrum clock system including:

- 14 (a) a spread spectrum clock source having a frequency modulation input and  
15 providing a clock signal;  
16 (b) a power supply circuit providing a supply voltage output;  
17 (c) a modulating arrangement including a modulator connected to provide a  
18 modulated reference input to the power supply circuit, the modulating  
19 arrangement applying ~~operatively connected to apply a first modulation to one of~~  
20 the supply voltage output ~~or the frequency of the clock signal~~, the first modulation  
21 varying the ~~one of the supply voltage output or the frequency of the clock signal~~

1 about a nominal value for the ~~one of the~~ supply voltage output or the frequency of  
2 the clock signal; and

- 3 (d) a corresponding modulating arrangement operatively connected to apply the  
4 supply voltage output to produce a corresponding modulation to in the other one  
5 ~~of the supply voltage output or the frequency of the clock signal, the~~  
6 corresponding modulation varying the ~~other one of the supply voltage output or~~  
7 the frequency of the clock signal about a nominal value for the ~~other one of the~~  
8 ~~supply voltage output or the frequency of the clock signal.~~

9  
10 11. Canceled

11  
12 12. (Currently Amended) The apparatus of Claim ~~11~~ 10 further including:

- 13 (a) a signal translator connected to receive the ~~system~~ supply voltage output and  
14 provide a translated output to the frequency modulation input of the spread  
15 spectrum clock source.

16  
17 13-15 Canceled

18  
19 16. (Original) The apparatus of Claim 10 wherein the first modulation waveform and the  
20 corresponding modulation waveform are unequal.

1 17. (Currently amended) A method for providing a spread spectrum clock signal for a circuit,  
2 the method including the steps of:

3 (a) modulating a power supply signal for the circuit at a first modulation to vary the  
4 power supply signal about a nominal supply voltage; and

5 (b) conditioning the modulated power supply signal for the circuit to produce a  
6 conditioned signal at the first modulation;

7 (bc) applying the conditioned signal to a modulation input of a spread spectrum clock  
8 source circuit to modulate modulating the frequency of the clock signal for the  
9 circuit at a corresponding modulation to vary the frequency of the clock signal  
10 about a nominal clock signal frequency.  
11

12 18. (Previously presented) The method of Claim 17 wherein the step of modulating the power  
13 supply signal for the circuit includes the step of:

14 (a) modulating a reference voltage input to a power supply for the circuit.  
15

16 19-22 Canceled  
17  
18

19 23. (Original) The method of Claim 17 wherein the first modulation waveform and the  
20 corresponding modulation waveform are unequal.  
21